No. 03-935

In The Supreme Court of the United States

STATE OF NORTH DAKOTA AND
STATE OF SOUTH DAKOTA,

Petitioners,

v.

LT. COL. K.F. UBBELOHDE, DIST. ENGINEER, OMAHA DIST., US ARMY CORPS OF ENGINEERS, BRIG. GEN. W.T. GRISOLI, COMMANDER, NW DIV., PORTLAND, OR. US ARMY CORPS OF ENGINEERS; STATE OF MISSOURI AND THE STATE OF NEBRASKA; ET AL.,

Respondents.

On Petition For Writ Of Certiorari To The United States Court Of Appeals For The Eighth Circuit

STATE OF MONTANA AMICUS BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether the 1944 Flood Control Act allows the Corps of Engineers to consistently allocate the water from the Missouri River's upper basin reservoirs to serve downstream navigation at the expense of upstream fish, wildlife and recreation?

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STATE OF MONTANA AMICUS BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI

The State of Montana supports Petitioners, State of North Dakota and State of South Dakota and urges the Court to accept the Petition for Certiorari in order to determine whether the 1944 Flood Control Act, 16 U.S.C. 460d, allows the United States Army Corps of Engineers to consistently allocate the water from the Missouri River's upper basin reservoirs to serve downstream navigation at the expense of upstream fish, wildlife and recreation.

INTEREST OF AMICUS CURIAE

Attorney General Mike McGrath is the chief legal officer of the State of Montana and one of five members of the State Land Board, which governs the use of 5.2 million acres of state-owned land. In his official capacity, the Attorney General has significant responsibility for management of trust resources within Montana and for protecting Montana's resources in the interest of the citizens of the state. With approximately 250,000 acres of water in Fort Peck Reservoir and over 400 miles of the Missouri River within the state, Montana has one of the largest river reaches affected by the operation of the Missouri River System and the mainstem reservoirs. This is a significant public resource for the people of Montana, and under Montana law, the Attorney General has the common-law authority to appear in all actions affecting the public interest. *State ex rel. Olsen v. Public Serv. Comm'n*, 129 Mont. 101, 115, 283 P. 2d 602, 604 (1955).

The Flood Control Act of 1944 vests the United States' power with the federal government's Engineering Corps, to make far-reaching allotments of water in the arid west. The ensuing management decisions exercised by the Corps reach into the very heart of state resource management, meriting strict adherence to equal consideration for all uses of the river. Management decisions of a river system that crosses seven states and traverses a 523,900 square mile area should not be determined lightly, nor without consideration of competing interests and needs, nor in an arbitrary manner. According to a Montana Department of Natural Resources and Conservation water resources study, the average stream flow contribution to the Missouri River from Montana is 7,774,000 acre-feet per year. When combined with the flow from Montana's Yellowstone River and other tributaries, the state's contribution to the Missouri River is about 8,804,000 acre-feet per year. This flow represents 76 percent of the average stream flow at Sioux City, Iowa, and 30 percent of the stream flow at the mouth of the Missouri River where it joins the Mississippi. The magnitude of the volume of water alone gives Montana an abiding interest in this vital resource and merits review of the decision below. In addition, the *Summary of Actual 2000-2001 Operations*, February 2002, App. 3 identifies a significant recreational interest in Montana's Fort Peck Reservoir, including "5,250,300 visitor hours in 1999 and increasing to 6,206,440 visitor hours in 2001." *Id.*, Table XIII, p. 48. Montana holds a primary interest in the management of the river system for its recreational values, its fish and wildlife and the critical habitat the river system provides and a further interest in the concomitant economic value of a viable recreational use of Fort Peck Reservoir. The decision below holds that the Corps must apply an analysis that gives a priority to

navigation, a dying industry on the Missouri, as a dominant function of the river. The holding restricts consideration of fish, wildlife and recreation to a secondary sequential consideration of uses. Such an application is wholly inconsistent with the 1944 Flood Control Act and will continue to compromise Montana and other upstream states' primary interest in the river, placing critical river and reservoir habitat at risk.

In Montana, the United States Army Corps of Engineers operates the mainstem Missouri River reservoir at Fort Peck, and the State of Montana manages the wildlife and fisheries and their critical habitat at the reservoir. In its sovereign capacity, the State of Montana has previously brought actions on its behalf and on behalf of all of its citizens and visitors, participating in related cases in United States District Court challenging the operation of the Missouri River under the 1944 Flood Control Act for more than a decade. *State of Montana v. Kurt Ubbelohde, et al.* (Civ. No. 02-70-Blg-RFC) (D. Mont. filed May 13, 2002)); *State of South Dakota, et al. v. Needham, [later Bornhoft], et al.* (Civ. No. 91-26 Blg.) (D. Mont. filed Feb. 4, 1991). The Petitioner also accurately notes that, although not a party to this action, Montana's Department of Fish, Wildlife & Parks is currently a party to on-going litigation involving the Missouri River's proper management. *Blaske Marine, Inc., et al. v. Hon. Gale Norton, et al.* (Civ. No. 8.03-CV –142 filed April 15, 2003).

Montana maintains a current and vital interest in the resolution of the management of the Missouri River system. The State of Montana supports North Dakota and South Dakota's petition for writ of certiorari because Montana is similarly situated upstream on the Missouri River system and suffers similar harm when the United

States Army Corps of Engineers manages the reservoirs in a manner that conflicts directly with Montana's primary interest in the use of the water for recreation, fish and wildlife, along with the critical habitat to support those uses. The fish and wildlife resources along the Upper Missouri River reservoir at Fort Peck have led to the development of a valuable recreational industry, yet the reservoir and the waters within rely upon appropriate operation of the reservoir by the United States Army Corps of Engineers. The Army Corps of Engineers yearly sets out a plan for the operation of the reservoirs in Montana, North Dakota and South Dakota in its Annual Operating Plan based upon the Flood Control Act. While the Annual Operating Plan draft is submitted to the upstream states for comment, the plan is implemented at the discretion of the Corps of Engineers, under the auspices of its Master Manual. Both management documents rely upon an archaic and, on occasion, erroneous interpretation of the Flood Control Act of 1944, one that has been further analyzed in a manner inconsistent with the Act by the Court below. For these reasons, the State of Montana has a vital interest in an accurate interpretation and application of the Flood Control Act of 1944, and respectfully submits its support of North Dakota and South Dakota's Petition for Writ of Certiorari.

BACKGROUND

At times, the Corps of Engineers has released water from Fort Peck Reservoir in Montana to make up water for the river system that it cannot for one reason or another release from Lake Sakakawea in North Dakota, from Oahe Reservoir in North and South Dakota, or from Lake

Francis Case Reservoir in South Dakota. These activities are inconsistent with the Flood Control Act and have put the survival of Montana's fish and wildlife resources, along with its recreational interests in the reservoir, in peril. *Temporary Restraining Order, State of Montana v. Ubbelohde, et al.*, CV-02-70 Blg-RFC (D. Mont. filed May 13, 2002). The Corps' management of the Missouri River System during the recent past years of drought in the upstream states has consistently misallocated the waters in the upstream reservoirs, placing the fish and wildlife, along with the recreation they provide, at risk. During periods of low water, the Corps will regularly short-change the fish and wildlife species in the upstream states in favor of downstream navigation, resulting in a decimation of critical habitat for which the State of Montana has management authority and trust responsibility. In the current case, the Court below misapplied the Flood Control Act of 1944 which results in the United States Army Corps of Engineers managing of the Missouri River mainstem reservoirs in a manner that pits one state's reservoir management against other states and allows downstream navigation to reign supreme over upstream recreational, fish and wildlife uses. The error of the Corps' continued operation of the river based upon the interpretation of the Act by the Court below is capable of repeating itself in hundreds of ways for decades to come if not reviewed. For all these reasons, the State of Montana, through its Attorney General, argues in support of North Dakota and South Dakota's petition.

The upper basin states took action more than a decade ago regarding the Corps of Engineers' operation of the upstream mainstem reservoirs. In a suit filed by South Dakota, North Dakota and Montana in United States

District Court in the District of Montana, the three states sought relief from a similar misapplication of the Flood Control Act by the Corps of Engineers that had categorized recreation and fish and wildlife as "secondary purposes." *State of South Dakota, et al. v. Needham [later Bornhoft]* Civ. 91-26-Blg. (D. Mont. filed Feb. 4, 1991.) In that action the states alleged that the United States had improperly assigned downstream uses of Missouri Reservoir waters higher priority than recreation, fish and wildlife uses as a result of an erroneous interpretation and subsequent setting of priorities which the Corps of Engineers sets forth in interpreting the Flood Control Act. The Corps then implemented those erroneous priorities through its Annual Operating Plan under the auspices of its Master Manual. Although Judge Shanstrom dismissed the 1991 matter without prejudice, he did so after concluding, "the Corps has agreed to give all water uses **equal consideration** while the Master Manual review is undergoing a revision" and the court further stated that "plaintiffs have obtained an acknowledgement by defendants that all current Missouri River water uses will receive **equal consideration** during review of the Master Manual. Moreover, there is a reasonable expectation that the Corps' revised plan will reflect contemporary uses and needs of the Missouri River Basin." *Bornhoft* Order at 3, App. 1. (Emphasis added.) The United States obtained dismissal of the three states' action with representations that "all uses are to receive **equal consideration**." *Id.* at 4. (Emphasis added.) The following year heavy rains came and filled Fort Peck, Lake Sakakawea and Oahe Reservoirs. The drought and ensuing management conflicts were put off for another decade.

With yet another series of drought years hard upon the upper basin states, the management conflict is unresolved, and the promised Master Manual revisions, although now released in draft form, have not been completed after almost 15 years of review. Despite those long-ago assurances that the Corps would consider all uses equally, an assurance confirmed by the District Court's Order in 1993, the Corps in this current dispute again disregarded the very analysis it assured. The Corps failed to give all uses equal consideration in its operation in 2002, which again led to sequential litigation upstream as reservoirs were drawn down. The Eighth Circuit Court's decision further misapplies the necessary analysis of equal uses that the Corps must undertake pursuant to the 1944 Flood Control Act.

ARGUMENT

I. THE HOLDING BELOW PERMITS THE CORPS OF ENGINEERS TO OPERATE THE MISSOURI RIVER RESERVOIR SYSTEM IN A MANNER THAT PREVENTS THE UPSTREAM STATES FROM PROTECTING THEIR PRIMARY INTEREST IN THE RIVER FOR RECREATION, FISH, WILDLIFE AND THE CRITICAL HABITAT NECESSARY TO SUSTAIN THE FISH AND WILDLIFE SPECIES.

The Corps' decisions to increase releases from Fort Peck Reservoir in Montana, Lakes Sakakawea and Oahe in North Dakota and Lakes Oahe and Francis Case in South Dakota during the continuing drought with all its attendant harm is an abuse of its management discretion, is inconsistent with the Flood Control Act, and the Eighth

Circuit decision upholding those actions should be reviewed. The Court below ruled correctly that the Corps actions are subject to judicial review as its "discretion is not unconstrained." Petitioners' App. at 21. However, under an "arbitrary and capricious standard" set forth in 5 U.S.C. § 706, where no preference is given in the Act, nor in the legislative history, nor is it abided in the Corps' representations of equal use analysis, the Corps' management discretion was abused. *See, e.g., Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 376-378 (1989); *Oahe Conservancy Subdistrict v. Alexander*, 493 F. Supp. 1294, 1298 (D.S.D. 1980).

The reviewing court should have reviewed whether the Corps' decisions were based upon a consideration of the relevant factors under the Flood Control Act and whether there has been a clear error of judgment. *Marsh*, 490 U.S. at 402, (*quoting Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971)). The reviewing court's inquiry should have been searching and careful although narrow. *Id.* However, the Court below left standing an arbitrary draw down of water from the upstream reservoirs that was contrary to the equal uses analysis that the Corps should have applied. The failure of the Corps to consider equally the relevant uses of the river system, both for downstream navigation and upstream recreation, fish and wildlife, clearly demonstrates that the Corps did not make a reasoned evaluation of all the factors under the Act. As a result, Petitioners correctly urge review.

There has been a history of analysis of the priority of uses that the Corps has applied in operating the reservoirs and it has been found wanting. The United States General Accounting Office in 1992 found that the Corps of Engineers was flatly incorrect in its view that recreation, fish

and wildlife are secondary purposes. The General Accounting Office concluded that it could find "no appropriate basis" for the Corps of Engineers' view that recreation was a secondary purpose that "receives water that is left over after other uses are satisfied." General Accounting Office, *Water Resources: Corps' Management of the Ongoing Drought in the Missouri River Basin*, No. 92-4 (Jan. 1992), at 5 (App.2.) The General Accounting Office also rejected the Corps' view that recreation could or would not be given priority over other uses "even if their analysis showed that the change in priority could increase total system benefits. . . ." *Id.* at 4-5.

It should be noted with certainty that the Court below has wrongly applied a priority analysis to the Master Manual. Thus, the Corps will remain committed to operating the mainstem Missouri dams, including Fort Peck Dam, Garrison Dam, Oahe Dam and Fort Randall Dam on the basis of misapplied priorities assigned to uses of water that are inconsistent with the Flood Control Act of 1944. Under the analysis of the Court below, the Corps continues to misread the Act and fails to evaluate all the factors as demanded by the Flood Control Act. Where the Court below has determined that the Master Manual is binding on the Corps, the Corps' erroneous management decisions will continue to gravely harm the recreational, fish, wildlife and critical habitat for species in the upstream reservoirs unless reviewed by the Court. As demonstrated to the Court below, the Corps insisted that it could not change the water release regime it envisioned for spring 2002 because to do so would be contrary to the Master Manual. Even where the Master Manual is relied upon, and particularly where it is binding on the agency as determined by the Eighth Circuit Court below, the Corps

should be free to manage the river system with respect and consideration of all uses of the water equally as the Act requires. *Master Manual* § 9.3, The Master Manual's fifth priority for recreation, fish, and wildlife states, "[i]nsofar as possible without serious interference with the foregoing functions, the reservoirs will be operated for maximum benefit to recreation, fish and wildlife." *Master Manual* § 9.3. Under the very terms of the priorities set out in the Manual, when there will be no "serious interference" with navigation, the reservoirs are to be operated for the maximum benefit to the upstream uses. If the terms of this section of the Master Manual interpreting the Flood Control Act are to be given content, upstream interests in recreation, fish and wildlife must be preferred over navigation so long as doing so does not cause "serious interference" with downstream navigation. In the context of the case where irreparable harm will result to Montana's spawning fish species or to North Dakota's cold water fishery or to South Dakota's recreational fishery, the Corps must balance navigation and upstream recreation, and determine what, if any, effects on navigation exist when managing for critical habitat for fisheries and recreation. If no serious interference is determined, the Corps should prefer recreation. The record is devoid of any determination made by the Corps that upstream fisheries, habitat and recreation interfere in any serious manner with downstream navigation.

By its claimed reliance on the Master Manual, but without consideration of the actual relevant factors under the Flood Control Act, the Corps will consistently fail to make a reasoned decision with equal consideration to all uses of the river. This is particularly true where, as here, the Court below misapprehended the sequential priorities

test under the Flood Control Act, yet held that the Master Manual is binding and must be followed.

II. THE EIGHTH CIRCUIT COURT'S OPINION IS INCONSISTENT WITH THE 1944 FLOOD CONTROL ACT IN CONCLUDING THAT THE CORPS OF ENGINEERS' MANAGEMENT OF WATER FROM THE UPSTREAM RESERVOIRS WAS PROPER UNDER A SEQUENTIAL CONSIDERATION OF USES TEST.

The Court below largely ignored what Petitioners appropriately argue: that the preamble to the 1944 Flood Control Act is instructive for the balancing of the various services the river system provides. Navigation under the act is to be limited to that which provides "a substantial benefit" and is "operated consistently with appropriate and economic use of the waters . . . by others." Petition at 16. North Dakota and South Dakota further argue that navigation does not meet that limitation because it does not provide a substantial benefit to the basin according to the Revised Draft Environmental Impact Statement. In fact, on balance upstream uses for fish, wildlife and recreation produce a great economic benefit when compared to a marginal navigation industry. Petition, App. at 83. Montana strongly urges that interpretation and further argues that the Corps of Engineers recognized and confirmed that interpretation in response to the earlier litigation. (*Bornhoft* Order at 3, App. 1.) Furthermore, the United States confirmed and supported that interpretation in its 1992 General Accounting Office Water Resources Study. (*GAO Water Resources*, Jan. 1992, at 4-5; App. 2.) Even so the Corps undertook to draw down water from Montana, North Dakota and South Dakota Reservoirs in

the spring of 2002 in the midst of a major drought without regard to that interpretation, leading to the current and ongoing litigation.

In May 2002, after South Dakota and North Dakota received injunctive relief for their reservoirs, Montana was forced to seek emergency relief for its reservoir. Montana successfully sought a ten-day injunction to prevent the release of water from Montana's Fort Peck Reservoir until the critical spawning period for pike and perch had passed. *State of Montana v. Ubbelohde, U.S. District Court, District of Montana*, CV-02-70-Blg. In that 2002 litigation, each upstream state was required to seek emergency injunctive relief in order to prevent the Corps from managing the reservoirs contrary to the needs of the fish, wildlife and recreation. While Montana's critical spawning period was accomplished and our cause thereafter dismissed by stipulation, the management issue remained largely unresolved because the Corps continued to improperly assign downstream uses of Missouri Reservoir waters higher priority than recreation, fish and wildlife uses.

If the decision of the Court below is left unreviewed, the Corps of Engineers will continue to apply a standard contrary to the Flood Control Act of 1944, especially in critical recurrent drought years, in contradiction to the Corps' own interpretation that "'[t]here is no statement in the Act . . . that navigation is always entitled to a priority over the needs of fish and wildlife.'" Petition at 21 (*quoting* Consolidated Reply Br. of Fed. Defendants-Appellants at 10). Indeed, even the legislative history of the Act is silent as to any priority of consideration. This too was conceded before the Court below, when the Corps stated, "the purposes identified in the legislative history, are not

specifically identified as primary or secondary purposes and are not prioritized in importance by Congress." *Id.* at 1, Pet. at 21-22. The only exceptions to equal consideration of all uses under the Act is the priority given to consumptive uses of the water, subject to flood control.

In a continuing misapplication of the Act, supported by the holding of the Court below, the upstream reservoirs will be drained to record low levels, causing substantial harm to the fish, wildlife and recreation in the upstream reservoirs. Such actions place Montana's critical habitat for species at risk. In turn, this management regime has and will continue to cause substantial economic harm to the upstream states, including Montana.

CONCLUSION

The decision of the Court below is inconsistent with the 1944 Flood Control Act and fails to protect the upstream states' primary interest in the Missouri River. The State of Montana supports the Petition of North Dakota and South Dakota and urges the Court to accept certiorari.

Respectfully submitted,

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February 2004

APPENDIX

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
BILLINGS DIVISION

STATE OF SOUTH DAKOTA; STATE OF NORTH DAKOTA; STATE OF MONTANA; et al., Plaintiffs, vs. COLONEL STEWART H. BORNHOFT, District Engineer, Omaha District United States Army Corps of Engineers, et al., Defendants.	No. CV CV-91-26 JDS-BLG MEMORANDUM AND ORDER * * * * * * * * * * * (Filed Feb. 3, 1993)

This matter is before the Court on plaintiff States' Motion to Stay Proceedings in the above-entitled cause. Plaintiff States' motion, as well as briefing by the respective parties on the issue of ripeness, originated from a telephonic status conference conducted by the Court on July 23, 1992. Upon careful consideration of the briefs submitted and arguments advanced therein, I am prepared to rule.

BACKGROUND

Plaintiff States filed this action on February 4, 1991, seeking a declaratory judgment that the United States Army Corps of Engineers ("Corps") has improperly assigned downstream uses of Missouri River reservoir waters higher priority than recreation and fish and wildlife uses "as a

result of its erroneous interpretation and the unlawfully static priorities which the Corps of Engineers sets forth in the Master Manual and annually implements in the annual operating plan . . . " *See* Complaint, para. 20.

Plaintiffs' pleadings seek this Court to order the Corps to develop a plan of operation that "reflects contemporary uses and needs of the basin."

Prior to the filing of this action, the Corps initiated a review of its Master Manual procedures pursuant to Army regulations, 33 C.F.R. 222.7. Such administrative procedure provides for the development of technical information concerning the impacts of various operating criteria. The process permits comment and review by all affected states and users of the river.

During the course of the present Master Manual review and the preparation of an Environmental Impact Statement, "all existing uses of the system will be considered in determining whether revisions to the current water control plan should be made." *See* Declaration of Duane Sveum. In fact, the Corps has asserted that, during this review process, all uses are to receive equal consideration. Plaintiffs acknowledge, as well, that the Corps of Engineers' official legal position may have changed in recent years with regard to the operation of the Missouri River mainstem dams to allow for equal consideration of recreational uses. *See* Plaintiff States' Brief In Support of Stay, pp. 8-9.

In the present motion, plaintiffs seek a stay of the above-entitled action pending completion of the Master Manual Review in order to determine whether "the Corps will adhere to its 'official' position through the completion of that review. . . . " *Id* at 18.

For the reasons advanced below, dismissal, rather than a stay of proceedings, is appropriate in this matter.

DISCUSSION

The present action is appropriate for dismissal because the issues raised in the complaint are no longer alive. The corps has agreed to a form of interim relief[1] for plaintiffs that essentially renders moot the issues in the complaint. Mootness is an element of justiciability, and, therefore, the Court has a duty to consider it sua sponte. No jurisdiction exists to hear a case in which events have occurred that prevent the Court from granting effective relief. *Canez v. Guerrero*, 707 F.2d 443, 446 (9th Cir.1983).

Plaintiffs have obtained an acknowledgement by defendants that all current Missouri River water uses will receive equal consideration during the review of the Master Manual. Moreover, there is a reasonable expectation that the Corps' revised plan will reflect contemporary uses and needs of the Missouri River Basin.[2] In light of the Corps' present position, I see no way in which this Court can provide any more effective relief if this matter is eventually decided on the merits in favor of plaintiffs. Thus, the issues before the Court are moot.

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[1] The Corps has agreed to give all water uses equal consideration while the Master Manual Review is undergoing a revision.

[2] This expectation arises from what appears to be a change in the official policy of the Corps regarding equal consideration of uses as recently articulated by John Elmore, Chief, Operations, Construction & Readiness, Headquarters U.S. Army Corps of Engineers.

Even if the matter were not moot, this Court lacks jurisdiction to rule on the merits of the case because it is not ripe for determination. The ripeness inquiry asks whether the issues are fit for judicial decision and whether the parties will suffer hardship if the court does not consider the issues. *Gates v. Deukmejian*, 977 F.2d 1300, 1317 (9th Cir.1992) (citations omitted). The issue raised by this action is not fit for judicial resolution. In light of the Corps' practice during the revision of the Master Manual and its potential change of policy, the harm to plaintiffs is hypothetical rather than direct or immediate. Moreover, the plaintiffs have failed to demonstrate that they will suffer any hardship if I wait to determine whether an actual justiciable issue arises in the future.

Accordingly,

IT IS ORDERED that plaintiff States' motion for a stay of proceedings is hereby denied. This action is dismissed without prejudice for the reasons noted above.

IT IS FURTHER ORDERED that the Clerk of Court hereby terminate this action in the records.

DONE and DATED this 3rd day of February, 1993.

/s/ Jack D. Shanstrom
United States District Judge

United States General Accounting Office
GAO Report to Congressional Requesters

January 1992 **WATER RESOURCES**

Corps' Management of Ongoing Drought in the Missouri River Basin

GAO/RCED-92-4

GAO United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-241794

January 27, 1992

The Honorable Kent Conrad
Vice Chairman, Subcommittee on Water
and Power
Committee on Energy and Natural Resources
United States Senate

The Honorable Byron L. Dorgan
House of Representatives

As you requested, we reviewed the U.S. Army Corps of Engineers' management of the Missouri

River reservoir system under drought conditions in 1988, 1989, and 1990. Specifically, the report examines whether the Corps followed a drought contingency plan and identifies how the Corps set operating priorities for this plan.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 15 days from the date of this letter. At that time, we will send copies to interested parties and make copies available to others upon request.

This report was prepared under the direction of James Duffus III, Director, Natural Resources Management Issues, who may be reached on (202) 275-7756. Other major contributions are listed in appendix I.

/s/ J. Dexter Peach
J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

The Missouri River basin, encompassing all of Nebraska and parts of nine other North Central states, is experiencing its most severe drought since the 1930s. Below-normal rain and snowfall have left the water at three U.S. Army Corps of Engineers reservoirs on the upper Missouri River at levels significantly below normal. Concerned about the drought's impacts on the recreation industries supported by the reservoirs in Montana and the Dakotas, state officials questioned whether the Corps had a

drought contingency plan to conserve water in the reservoirs and equitably distribute the negative economic impacts of the drought.

The Vice Chairman, Subcommittee on Water and Power, Senate Committee on Energy and Natural Resources, and Representative Byron L. Dorgan asked GAO to (1) review whether in 1988, 1989, and 1990 the Corps followed a drought contingency plan and whether the plan reduced the amount of water released, and (2) identify how the Corps set operating priorities for this plan.

Background

The Corps operates six dams on the Missouri River – located above Sioux City, Iowa – as an integrated system. Water in the reservoirs makes possible commercial navigation between Sioux City and St. Louis, Missouri; generates hydroelectric power; provides municipal and industrial water supplies; and supports recreation industries in Montana, North Dakota, and South Dakota. The Corps manages the system according to its master Manual and operating priorities established in 1952. The Corps can fulfill all purposes of the Missouri River reservoir system under normal operating conditions. However, since 1988, the drought has prevented the Corps from meeting all users' demands for water. Competition for the available water supply has increased, particularly between recreation interests in the upper basin and navigation interests in the lower basin below the reservoirs.

Results in Brief

The Corps followed a drought contingency plan in 1988, 1989, and 1990 in releasing water from the reservoir system. Acting consistently with the plan, the Corps reduced winter release rates, shortened navigation seasons on the Missouri River, and reduced water levels in the navigation channel. As a result, 17 percent less water was released during the 3-year period than would have been released under normal operating conditions. The drought and the Corps' response to it adversely impacted all of the purposes served by the reservoirs except flood control.

The Corps' drought contingency plan, however, is based on assumptions about the amount of water needed for navigation and irrigation made in 1944 that are no longer valid, and the plan does not reflect the current economic conditions in the Missouri River basin. The Corps' ongoing comprehensive study of its operation of the reservoir system is expected to address these issues. Notwithstanding the results of its study, the Corps maintains on the basis of its interpretation of the authorizing legislation that unless it obtains congressional approval to change existing operating priorities, it must continue to give recreation a lower operating priority than other authorized purposes even if this lower priority results in decreased system benefits. GAO sees no appropriate

basis for the Corps' view. A lawsuit filed in federal court by three upper-basin states questions the legality of the Corps' position on recreation.

Principal Findings

Corps Followed a Drought Contingency Plan in 1988, 1989, and 1990

Declining water reserves in the Missouri River system triggered the Corps' drought contingency plan in July 1988. Following the plan, the Corps maintained normal water releases during a shortenened 1988 navigation season to offset the lower-than-normal runoff into the river downstream of the reservoirs. The Corps then reduced water releases during the 1988-89 and 1989-90 winters, shortened the 1989 and 1990 navigation seasons, and reduced the 1989 and 1990 navigation streamflows.

GAO estimated that if the Corps had not reduced its service to navigation and hydroelectric power for the 1988-1990 drought period, it would have released about 61.2 million acre-feet of water. Corps records show that the volume released was about 50.8 million acre-feet, or 17 percent less than under normal operations. As of December 31, 1990, drought operations had used about 42 percent of the water normally held in reserve for use during a drought. The Chief of the Corps' Reservoir Control Center in Omaha, Nebraska, estimated that

	as of September 1991, the reservoirs needed 4 to 6 years of normal runoff to return to normal operating levels.
Drought Has Impacted All Purposes Except Flood Control	Data obtained from the Corps, state officials, industry representatives, and private individuals indicated various drought impacts. Municipal, industrial, and rural water supplies above and below Sioux City experienced pumping and other problems because of the level of their intakes. Below Sioux City, commodity shipments on the river declined. Above Sioux City, hydroelectric power generation declined, private irrigators lost their water supplies, and receding shorelines left boating facilities at the upper three reservoirs on dry land and reduced the habitat for fish.
Some Corps' Assumptions About Demand for Water Are No Longer Valid	According to the Corps, the Congress approved the Missouri River reservoir system in 1944 to improve the basin's economic climate. At that time, the system's planners believed that they could achieve this by providing flood control, river transport for the lower basin's products, and irrigation for the upper basin's arid farmlands and by generating power for inhabitants throughout the basin. Conditions supporting these assumptions have changed over time. In 1944, the Corps estimated the demand for river transport of goods at 12 million tons annually. At commercial navigation's peak in 1977, 3.3

million tons of goods were shipped on the Missouri, or 72 percent less than the Corps' estimate. As of 1988, the tonnage shipped on the river had declined further, to 2.2 million tons. In addition, the federal government never constructed the massive irrigation projects anticipated in 1944 that would have used the reservoirs' water to irrigate 2.2 million acres of farmland. Conversely, the extent to which the reservoirs have generated recreation industries that provide significant economic benefits to their host states was not envisioned by the system's planners.

The Corps is reviewing its operation of the Missouri River reservoir system because information in the Master Manual is outdated and because users of the system have questioned the Corps' management of it. The Corps will analyze the national economic development benefits that can be derived from the reservoir system under various operating alternatives and plans to complete its review in early 1993.

Current Lawsuit Questions the Corps' Operating Priorities

On the basis of its interpretation of section 9 of the Flood Control Act of 1944, which authorized construction of the Missouri River system, the Corps believes that each authorized purpose is either primary or secondary. The Corps also believes that secondary purposes, which it

says includes recreation, must be relegated to a lower operating priority than primary purposes. As a result, according to the Corps, recreational use of the reservoirs was not a factor in the Corps' major water release decisions during the drought. Corps officials said they would not give priority to recreation over other purposes even if their analysis showed that the change in priority could increase total system benefits because of the Corps' position on primary and secondary purposes. They said that congressional approval would be needed to change existing operating priorities.

In February 1991, three upper basin states – Montana, North Dakota, and South Dakota – filed a lawsuit in federal court challenging the Corps' policy of categorizing a project's authorized purposes as primary and secondary. The outcome of this court case could have far-reaching implications because the Corps' policy is applicable agencywide. In essence, the states argue that because recreation is an authorized purpose of the Missouri River system, it is not a secondary purpose that receives only water that is left over after other uses are satisfied.

Because its review did not reveal a statutory scheme for regarding authorized purposes as primary or

secondary, GAO sees no appropriate basis for the Corps' view. The lawsuit may ultimately settle the legal question. However, in the absence of a court decision adverse to the Corps' position, the Corps will continue to relegate recreation to a low priority, even if the lower priority results in decreased system benefits, unless it is directed by the Congress to establish operating priorities for all authorized purposes on the basis of economic and other benefits to be derived from all authorized purposes.

Matter for Congressional Consideration

To ensure that the Corps maximizes the economic and other benefits of all authorized purposes of the Missouri River reservoir system and other Corps water projects, the Congress should consider enacting legislation to require the Corps to establish operating priorities for its reservoir projects on the basis of the economic, environmental, social, and other benefits to be derived from all authorized project purposes.

Agency Comments

GAO discussed the information in this report with officials at the Corps' headquarters and Missouri River Division. In general, the officials agreed that the information was accurate, and GAO incorporated suggested changes where appropriate. However, these officials disagreed with GAO's view that the Corps can

change the operating priority for recreation without congressional approval. GAO is suggesting that the Congress consider enacting legislation to clarify this matter. As requested, GAO did not obtain written agency comments on a draft of this report.

[LOGO]

US Army Corps of Engineers

Northwestern Division
Missouri River Basin
Water Management Division

[Map Omitted In Printing]

Missouri River Main Stem Reservoirs
Summary of actual 2000-2001 Operations

February 2002

TABLE IX
GROSS POWER SYSTEM GENERATION
(August 2000 through July 2001)

	Energy Generation 1,000 kWh	Peak Hour kWkW	Generation Date
Corps Powerplants – Main Stem			
Fort Peck	815,723	194,000	8/24/00
Garrison	1,655,956	450,000	9/1&4/00
Oahe	1,797,314	679,000	8/9/00
Big Bend	694,271	480,000	8/30/00
Fort Randall	1,333,746	343,000	6/30/01
Gavins Point	661,895	117,000	9&10/00
Subtotal	6,958,905	2,073,000	8/11/00
USBR Powerplants			
Canyon Ferry	247,977	50,000	8&10/00
Yellowtail*	287,051	93,000	7/01
USBR Subtotal	535,028		
FEDERAL SYSTEM TOTAL	7,493,933		

*Includes one half of total Yellowtail generation which is marketed by Eastern Division.

The tabulations in ***Tables X*** and ***XI*** summarize the total gross generation and power operations for the Eastern Division, P-S MBP, marketing area system for the past operating year. Actual settlement figures at the end of the billing periods differ somewhat from the calendar month figures shown.

Energy production in 2001 will only be 60 percent of normal due to low system releases from Gavins Point and the continued drought in the upper basin that has reduced generation at Fort Peck and Garrison.

6. **Fish Management**. Walleye harvest on Lake Sakakawea was again high in 2001. High numbers of northern pike, white bass, and smallmouth bass were also caught. Very good salmon fishing was noted in the lower portion of the lake.

* * *

Rainbow smelt are the primary forage species in both Lake Sakakawea and Oahe. Successful rainbow smelt reproduction is highly dependent on stable lake levels. Most eggs are laid in water less than one foot deep and are subject to desiccation through wave action and slight drops in water elevation. Rainbow smelt spawning was again very good in Lake Sakakawea during spring 2001. Early indications are that walleye spawning was also successful.

The walleye fishery continues to be in poor condition in Lake Oahe. Large numbers of small walleye in poor condition dominate the fishery. Poor smelt populations coupled with good walleye recruitment during the past years are thought to be primarily responsible. Regulations providing for liberal daily limits of walleye on Oahe in

2001 resulted in the highest ever documented April-May harvest. Rainbow smelt recruitment in the spring of 2001 was again thought to be poor in spite of stable water levels through the spawning period.

7. **Endangered and Threatened Species**. This is the 16th year of operation since the interior least terns and piping plovers were Federally listed as endangered and threatened species, respectively. Both the least tern and piping plover nest on sparsely vegetated sandbars, islands, and shoreline on the Missouri River. Stream gages have been installed on the Missouri River to monitor stream flows during the nesting season. These gages provide a check, as well as a stage history, throughout the season to help relate the effects of regulation and natural events at intervals along the river. The gagging data must be supplemented with observations of nesting activities and conditions to provide the information that is needed for regulation. A dynamic flow routing model has been developed to closely predict maximum river stages along the river for different combinations of daily discharge and hourly power peaking characteristics.

Beginning in 1999 the Omaha District created a computerized Threatened and Endangered Species Data Management System. Daily updated report data includes nest records, census and productivity data, site descriptions field journals, and messages. This database again provided vital information during the 2001 nesting season and proved to be a valuable tool in aiding release decisions benefiting endangered and threatened birds.

Although the Corps prevented inundation of nests where possible and accomplished habitat creation, fledging continued to be lower than predicted by the U.S. Fish and

Wildlife Service 1990 Biological Opinion until 1998 when fledge ratios exceeded the goal for both species. Predation, habitat degradation, severe weather, nest inundation, recent record runoff, and other factors contributed to the previous disappointing low fledging. The record fledging that occurred for both species in 1998 and the subsequent above average fledge ratios achieved since then can be attributed to the large amount of habitat created by the high flows of 1997. The creation of additional habitat has also allowed greater flexibility in the release levels at the lower two main stem projects.

For 2001, the majority of piping plovers were found on Lake Sakakawea and below Gavins Point Dam. Excellent shoreline habitat existed due to the lower reservoir levels caused by the reduced runoff. A record number of piping plover adults, 1054, were found on the Missouri River System this year. The majority of least terns were found on the Missouri River reaches below Garrison, and Gavins Point Dams.

Table XII shows the population distribution and productivity for terns and plovers for 1989 through 2001. Productivity estimates for these birds on the Missouri River in 2001 include only natural nesting. Adult birds in this table are considered breeders even though they may not have had nesting success. The term “fledglings/pair” means the number of young birds produced per breeding pair. This ratio is an estimate, as the fate of every single fledgling is impossible to obtain.

8. **Recreation and Resource Management**. The Missouri River main stem reservoirs provide outstanding opportunities for boating, fishing, swimming, camping, and other outdoor recreation pursuits. Tourism related to

the lakes is a major economic factor in all the states adjoining the main stem. During 2001, public use at these lakes was 59,665,900 visitor hours, a 2.0 percent decrease from 2000. Visitor attendance at the lake projects for 1999, 2000, and 2001 is shown in ***Table XIII***. ***Figure 12*** displays recreation-related visitor hours at each of the six projects for the years 1954 through 2001. The reporting method was changed from recreation days to visitor hours in 1987, and the reporting period was changed from calendar year to fiscal year in 1989 for all Corps of Engineers projects. All Corps projects, including the main stems, are now reporting visitation using the visitation Estimation Reporting System (VERS).

TABLE XIII
VISITATION IN VISITOR HOURS

MAIN STEM PROJECT	YEAR			PERCENT IN-CREASE OR DE-CREASE
	1999	2000	2001	
Fort Peek	5,250,300	5,946,100	6,206,400	+4.4
Garrison	16,312,100	16,555,900	15,318,200	-7.5
Oahe	15,372,500	14,623,200	14,308,300	-2.2
Big Bend	5,215,300	5,261,800	5,057,400	-3.9
Fort Randall	10,811,200	9,752,300	10,128,400	+3.9
Gavins Point	8,826,800	8,756,400	8,647,200	-1.2
SYSTEM TOTAL	61,788,200	60,895,700	59,665,900	-2.0

Figures computed using the Visitation Estimating Reporting System

* * *

[**Figure 12 Missouri River Main Stem Project Visitor Hours 1954 to 2001 Omitted**]